FEDERAL AVIATION ADMINISTRATION

AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

BIWEEKLY 2000-04

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U.S. Department of Transportation
Federal Aviation Administration
Regulatory Support Division
Airworthiness Programs Branch, AFS-610
P. O. Box 26460
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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; + - See AD for additional information.

Biweekly 2000-01

99-27-01		Pratt & Whitney	Engine: JT8D-209, -217, -217A, -217C, and -219
99-27-03		Fokker	F27 Mark 050 Series
99-27-04		Rolls-Royce	Engine: Dart 506, 510, 511, 514, 525, 526, 529, 530, +
99-27-05		Boeing	767-200, -300, and -300F Series
99-27-06		Boeing	757-200, -200PF, and -200CB Series
99-27-07	S 98-25-53	Airbus	A300 B4-600R and A300 F4-600R Series
99-27-08		SAAB	SAAB SF340A and SAAB 340B Series
99-27-09		Airbus	A300 B4-203 Series
99-27-10		Airbus	A310 and A300-600 Series
99-27-11		British Aerospace	BAC 1-11 200 and 400 Series
99-27-13		Fokker	F27 Mark 050 Series
99-27-14	S 99-01-15	Airbus	A340-211, -212-, -213, -311, -312, and -313 Series
99-27-15		General Electric	Engine: GE90-76B, -77B, -85B, -90B, and -92B
99-27-16		CFE	Engine: CFE738-1-1B
2000-01-51	E	Bombardier	CL-600-2B16 (CL-604)

Biweekly 2000-02

98-19-15 R1	R 98-19-15	Fairchild	SA226-T, SA226-T(B), SA226-AT, SA226-TC +
99-26-21		Boeing	737-300, -400, -500, -600, -700, and -800 Series
2000-01-01		Airbus	A300 B2-1A, B2-1C, B2-203, B2K-3C, B4-103, B4-2C +
2000-01-02		Raytheon	BAe.125 Series 1000A and 1000B and Hawker 1000 Series
2000-01-03		SAAB	SAAB 2000 Series
2000-01-04		SAAB	SAAB 2000 Series
2000-01-07		Bombardier	DHC-8-100, -200, and -300 Series
2000-01-08		British Aerospace	ATP
2000-01-09		General Electric	Engine: CJ610 Series and CF700 Series
2000-01-12	S 97-14-11	Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-01-13	S 99-08-12	Pratt & Whitney	Engine: JT9D-7, -7A, -7H, -7AH, -7F, -7J, -20, -20J +
2000-01-14		Boeing	777 Series
2000-01-15		Fokker	F27 Mark 050 Series
2000-01-17		McDonnell Douglas	MD-90 Series
2000-01-18		McDonnell Douglas	DC-8 Series
2000-01-51		Bombardier	CL-604 variant of Canadair Model CL-600-2B16 Series
2000-02-01		McDonnell Douglas	DC-8 Series
2000-02-02		Short Brothers	SD3-60 SHERPA, SD3-SHERPA Series and SD3-30 Series
2000-02-03		Boeing	737-300, -400, and -500 Series
2000-02-04		Airbus	A300 Series, A300-600, and A310 Series
2000-02-13		Bombardier	DHC-8-100, -200, and -300 Series

Biweekly 2000-03

99-26-03	COR	McDonnell Douglas	MD-11 Series
2000-02-05	S 98-24-01	British Aerospace	Jetstream 4101
2000-02-06		Bombardier	DHC-8-100, -200, and -300 Series
2000-02-07		Bombardier	DHC-7-100 Series
2000-02-08		Dornier	328-100 Series
2000-02-10		Boeing	747 Series
2000-02-11		Boeing	777-200 Series
2000-02-15		Raytheon	65-90, 65-A90, B90, and C90
2000-02-17		Rolls-Royce	Engine: RB211 Trent 768-60, 772-60, and 772B-60 Series
2000-02-18	S 97-09-14	Boeing	737-100, -200, -300, -400, and -500 Series
2000-02-19	S 90-02-16	Boeing	727 Series
2000-02-20	S 95-13-12 R1	Boeing	767 Series

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2000-02-21		British Aerospace	Jetstream 4101
2000-02-22		Boeing	747-400 Series
2000-02-23		McDonnell Douglas	DC-9-10, -20, -30, -40, and -50 Series and DC-9-81, +
2000-02-24		Airbus	A300, A310, and A300-600 Series
2000-02-33		Boeing	747-400 Series
2000-02-34		Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-02-35		Raytheon	DH.125, HS.125, BH.125 Series 1A, 1B, 3A, 400A, +
2000-02-36	S 98-20-10	Airbus	A319, A320, and A321 Series
2000-02-37		Boeing	747 Series
2000-02-38	S 91-20-07	Airbus	A300, A300-600, and A310 Series
2000-03-01		Boeing	747-100 and -200 Series
2000-03-02		General Electric	Engine: GE90-90B, -85B, and -76B Series
2000-03-03		General Electric	Engine: CF34-3A1 and -3B1 Series

Biweekly 2000-04

99-23-26 R1		General Electric	Engine: CF34-1A, CF34-3A, -3A1, -3A2, and CF34-3B +
2000-02-27		Embraer	EMB-110P1 and EMB-110P2
2000-02-39		Airbus	A300 Series
2000-03-04		General Electric	Engine: CF6-80C2 Series turbofan
2000-03-05		Boeing	737-200 Series
2000-03-07		Rolls-Royce	Engine: RB211-524H-36 Series turbofan
2000-03-08		McDonnell Douglas	MD-90-30
2000-03-10	S 98-25-11 R1	McDonnell Douglas	MD-11 Series
2000-03-11		McDonnell Douglas	MD-11 Series
2000-03-12		McDonnell Douglas	MD-11 Series
2000-03-13		McDonnell Douglas	MD-11 Series
2000-03-14		McDonnell Douglas	MD-11 Series
2000-03-15		McDonnell Douglas	MD-11 and MD-11F Series
2000-03-16		McDonnell Douglas	MD-11 Series
2000-03-17	S 97-23-01	Fairchild	SA226 and SA227 Series
2000-03-20		Airbus	A300-600
2000-03-21		Boeing	767
2000-03-22		Boeing	747-100, -200, and 747SP Series
2000-04-02		Boeing	737-100, -200, -300, -400, and -500 Series
2000-04-03		McDonnell Douglas	DC-3 and DC-4 Series
2000-04-04		Fokker	F.28 Mark 0070 and 0100 Series
2000-04-05		Israel	Astra SPX Series
2000-04-06		Airbus	A319, A320, and A321 Series
2000-04-07		British Aerospace	ATP
2000-04-08		Boeing	737-200C Series
2000-04-09		Embraer	EMB-135 and EMB-145 Series
2000-04-11		Airbus	A319, A320, and A321 Series

GENERAL ELECTRIC AIRCRAFT ENGINES
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

99-23-26 R1 GENERAL ELECTRIC AIRCRAFT ENGINES (GE): Amendment 39-11566. Docket 98-ANE-19-AD. Revises AD 99-23-26, Amendment 39-11422.

Applicability: General Electric (GE) CF34-1A, CF34-3A, -3A1, -3A2, and CF34-3B and -3B1 series turbofan engines, installed on but not limited to Bombardier, Inc. Canadair airplane models CL-600-2A12, -2B16, and -2B19.

NOTE 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent uncommanded engine accelerations, which could result in an engine overspeed, uncontained engine failure, and damage to the airplane, accomplish the following:

Replacement Requirements

(a) If the main fuel control (MFC) part numbers (P/N's) 6078T55P02, 6078T55P03, 6078T55P04, 6078T55P05, 6078T55P06, 6078T55P07, 6078T55P08, 6078T55P09, or 6078T55P10 is installed, and if the MFC has Buna-N preformed packings (O-rings), P/N's R1307P020 and R1307P141, do one of the following:

(1) Replace Buna-N O-rings with Viton O-rings, P/N's M83485-1-020 (M83485/1-020) and 37B201714P130, within 30 days after the effective date of this AD, in accordance with the Accomplishment Instructions, paragraph 3.A., of alert service bulletin (ASB) CF34AL 73-A0025, dated July 7, 1999 or ASB CF34BJ 73-A0040, dated July 7, 1999. Or,

(2) For all CF34-3A1 engines with serial numbers (SN's) 807001 and up, CF34-3B engines with SN's 872001 and up, and CF34-3B1 engines with SN's 872001 and up, with main fuel control (MFC) part numbers (P/N's) 6078T55P02, 6078T55P03, 6078T55P04, 6078T55P05, 6078T55P06, 6078T55P07, 6078T55P08, 6078T55P09, or 6078T55P10 installed, within 30 days after the effective date of this AD, install an MFC with a flange vent groove that conforms to the requirements of CF34 ASB CF34AL S/B 73-0026, dated August 12,1999, or CF34BJ S/B 73-0041, dated August 12,1999, or revision 1, dated November 1, 1999.

Replacement of the MFC

(b) For all CF34-1A, -3A, and -3A2 series engines with SN's 350003 through 350525, install an MFC with a flange groove that conforms to the requirements of CF34 SB CF34-BJ S/B 73-0041, dated August 12,1999, or Revision 1, dated November 1, 1999, the next time the engine is removed or the next time the MFC is removed.

(c) Install a serviceable MFC with improved overspeed protection as follows:

(1) For all CF34-1A, -3A, and -3A2 series engines, install a serviceable MFC at the next hot section inspection, or within 53 months after the effective date of this AD, whichever occurs first, in accordance with step 2A through step 2G of the Accomplishment Instructions of CF34 ASB No. A73-33, dated November 21, 1997; or Revision 1, dated May 29, 1998; or Revision 2, dated March 9, 1999; or with step 3A(1) through step 3A(7) of the Accomplishment Instructions of CF34 ASB No. CF34-BJ 73-A0033, Revision 3, dated September 9, 1999, or Revision 4, dated November 1, 1999.

(2) For CF34-3A1, and -3B series engines installed on Canadair aircraft models CL601 or CL604 (Challenger airplanes), install a serviceable MFC at the next hot section inspection, or within 53 months after the effective date of this AD, whichever occurs first, in accordance with step 2A through step 2G of the Accomplishment Instructions of CF34 ASB No. A73-33, dated November 21, 1997; or Revision 1, dated May 29, 1998; or Revision 2, dated March 9, 1999; or with step 3A(1) through step 3A(7) of the Accomplishment Instructions of CF34 ASB No. CF34-BJ 73-A0033, Revision 3, dated September 9, 1999, or Revision 4, dated November 1, 1999.

(3) For CF34-3A1 and -3B1 series engines installed on Canadair aircraft model CL601RJ (Regional Jet airplanes), install a serviceable MFC within 4,000 hours TIS after the effective date of this AD, or within 17 months after the effective date of this AD, whichever occurs first, in accordance with step 2A through step 2G of the Accomplishment Instructions of CF34 ASB No. A73-19, Revision 1, dated February 20, 1998; or Revision 2, dated March 9. 1999; or with step 3A(1) through step 3A(7) of the Accomplishment Instructions of CF34 ASB No. CF34-AL 73-A0019, Revision 3, dated September 9, 1999.

Terminating Action

(d) Replacing an MFC with a serviceable MFC, as defined in paragraph (e) of this AD, constitutes terminating action for the requirements of this AD.

Definition of a Serviceable MFC

(e) For the purposes of this AD, a serviceable MFC is defined as any MFC that incorporates the improved overspeed protection modifications, or an MFC that has been reworked to provide the improved overspeed protection as provided by the applicable GE ASB and is not one of the following P/N's 6078T55P02, 6078T55P03, 6078T55P04, 6078T55P05, 6078T55P06, 6078T55P07, 6078T55P08, 6078T55P09, 6078T55P10, 6047T74P07, 6047T74P09, or 6091T07P01.

Alternative Method of Compliance

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Special Flight Permits

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

Manufacturer Service Bulletins

(h) The inspection shall be done in accordance with the following GE service bulletins:

Document No.	Pages	Revision	Date
CF34AL 73-A0025	All	Original	July 7, 1999
CF34AL 73-0026	All	Original	August 12,1999
CF34BJ 73-A0040	All	Original	July 7,1999
CF34BJ 73-0041	All	Original	August 12,1999
CF34-BJ 73-0041	All	1	November 1, 1999
A73-19	All	1	February 20, 1998
A73-19	1	2	March 9, 1999
	3	2	March 9, 1999
CF34-AL 73-A0019	All	3	September 9, 1999
A73-33	All	Original	November 21, 1997
A73-33	All	1	May 29, 1998
A73-33	1	2	March 9, 1999
	3	2	March 9, 1999
CF34-BJ 73-A0033	All	3	September 9, 1999
CF34-BJ 73-A0033	All	4	November 1, 1999

(i) The incorporation by reference of GE ASB A73-19, dated February 20, 1998; ASB A73-33, dated November 21, 1997; and ASB A73-33, revision 1, dated May 29, 1998, was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 as of July 27, 1999.

The incorporation by reference of GE ASB's No. CF34AL 73-A0025, dated July 7, 1999; CF34BJ 73-A0040, dated July 7, 1999; GE service bulletin (SB) CF34AL S/B 73-0026, dated August 12, 1999; and GE SB CF34BJ S/B 73-0041, dated August 12,1999, was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 as of December 6, 1999.

Address for Obtaining Referenced Service Bulletins

(j) Copies may be obtained from GEAE Technical Publications, Attention: H. Decker MZ340M2, 1000 Western Avenue, Lynn, MA 01910; telephone (781) 594-6323, fax (781) 594-0600. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

Effective Date of This AD

(k) This amendment becomes effective February 17, 2000.

FOR FURTHER INFORMATION CONTACT: Norman Brown, Controls Specialist, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone: (781) 238-7181; fax: (781) 238-7199.

Issued in Burlington, Massachusetts, on February 8, 2000.

Thomas A. Boudreau, Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service

EMBRAER
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-02-27 EMPRESA BRASILEIRA DE AERONAUTICA S.A.: Amendment 39-11545; Docket No. 99-CE-42-AD.

(a) What airplanes are affected by this AD?: Models EMB-110P1 and EMB-110P2 airplanes, all serial numbers, that are:

(1) equipped with pneumatic deicing boots; and

(2) certificated in any category.

(b) Who must comply with this AD?: Anyone who wishes to operate any of the above airplanes on the U.S. Register. The AD does not apply to your airplane if it is not equipped with pneumatic de-icing boots.

(c) What problem does this AD address?: The information necessary to activate the pneumatic wing and tail deicing boots at the first signs of ice accumulation is critical for flight in icing conditions. If we did not take action to include this information, flight crews could experience reduced controllability of the aircraft due to adverse aerodynamic effects of ice adhering to the airplane prior to the first deicing cycle.

(d) What must I do to address this problem?: To address this problem, you must revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following requirements for activation of the ice protection systems. You must accomplish this action within the next 10 calendar days after the effective date of this AD, unless already accomplished. You may insert a copy of this AD in the AFM to accomplish this action:

"• Except for certain phases of flight where the AFM specifies that deicing boots should not be used (e.g., take-off, final approach, and landing), compliance with the following is required.

• Wing and Tail Leading Edge Pneumatic Deicing Boot System, if installed, must be activated:

- At the first sign of ice formation anywhere on the aircraft, or upon annunciation from an ice detector system, whichever occurs first; and

- The system must either be continued to be operated in the automatic cycling mode, if available; or the system must be manually cycled as needed to minimize the ice accretions on the airframe.

• The wing and tail leading edge pneumatic deicing boot system may be deactivated only after leaving icing conditions and after the airplane is determined to be clear of ice."

(e) Can the pilot accomplish the action?: Yes. Anyone who holds at least a private pilot certificate, as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7), may incorporate the AFM revisions required by this AD. You must make an entry into the aircraft records that shows compliance with this AD, in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(f) Can I comply with this AD in any other way?: Yes.

(1) You may use an alternative method of compliance or adjust the compliance time if:

(i) Your alternative method of compliance provides an equivalent level of safety; and

(ii) The Manager, Small Airplane Directorate, approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager.

(2) This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(g) Where can I get information about any already-approved alternative methods of compliance?: Contact the Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4121; facsimile: (816) 329-4091.

(h) What if I need to fly the airplane to another location to comply with this AD?: The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(i) When does this amendment become effective?: This amendment becomes effective on March 24, 2000.

FOR FURTHER INFORMATION CONTACT:
Mr. John P. Dow, Sr., Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 506, Kansas City, Missouri 64106; telephone: (816) 329-4121; facsimile: (816) 329-4090.

Issued in Kansas City, Missouri, on January 25, 2000.
Michael Gallagher, Manager, Small Airplane Directorate, Aircraft Certification Service

AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-02-39 AIRBUS INDUSTRIE: Amendment 39-11557. Docket 2000-NM-16-AD.

Applicability: Model A300 series airplanes, having serial numbers 1 through 156 inclusive; certificated in any category; except those airplanes on which Airbus Modification 2611 has been installed.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracking of the longitudinal skin splice above the mid-passenger door panels, which could result in reduced structural integrity of the fuselage pressure vessel, accomplish the following:

Ultrasonic or Detailed Visual Inspection

(a) Within 14 days after the effective date of this AD, accomplish the requirements of either paragraph (a)(1) or (a)(2) of this AD, in accordance with Airbus All Operators Telex (AOT) A300-53A0352, dated January 4, 2000.

(1) Perform a one time ultrasonic inspection to detect cracking of the longitudinal skin splice above the mid-passenger door panels below stringer 11 (left- and right-hand) and between frames 28A and 30A.

(i) If no cracking is detected, no further action is required by this AD.

(ii) If any cracking is detected, prior to further flight, accomplish the requirements of paragraph (b) of this AD.

(2) Perform a detailed visual inspection to detect cracking of the longitudinal skin splice above the mid-passenger door panels below stringer 11 (left- and right-hand) and between frames 28A and 30A.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirrors, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(i) If no cracking is detected, accomplish the requirements of paragraphs (a)(2)(i)(A) and (a)(2)(i)(B) of this AD.

(A) Repeat the detailed visual inspection thereafter at intervals not to exceed 80 flight cycles; and

(B) Within 90 days after the effective date of this AD, accomplish the requirements of paragraph (a)(1) of this AD.

(ii) If any cracking is detected, prior to further flight, accomplish the requirements of paragraph (b) of this AD.

Corrective Actions

(b) For airplanes on which any cracking is detected during any inspection required by paragraph (a)(1) or (a)(2) of this AD, prior to further flight, install either a temporary or permanent repair, in accordance with Airbus AOT A300-53A0352, dated January 4, 2000.

(1) If a temporary repair is installed, prior to the accumulation of 2,000 flight cycles after the installation of the temporary repair, install the permanent repair.

(2) If a permanent repair is installed, no further action is required by this AD.

Reporting Requirement

(c) Within 10 days after accomplishing the initial inspection required by paragraph (a)(1) or (a)(2) of this AD, and after all repetitive inspections required by paragraph (a)(2)(i) of this AD, as applicable, submit a report of the inspection results (both positive and negative findings) to: Mr. Rolland Filaquier - AI/SE-A21, Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The actions shall be done in accordance with Airbus All Operators TelexA300-53A0352, dated January 4, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in French airworthiness directive T2000-001-300(B), Revision 1, dated January 7, 2000.

(g) This amendment becomes effective on February 22, 2000.

FOR FURTHER INFORMATION CONTACT:
Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on January 31, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

GENERAL ELECTRIC COMPANY
AIRWORTHINESS DIRECTIVE
ENGINE
LARGE AIRCRAFT

2000-03-04 GENERAL ELECTRIC COMPANY: Amendment 39-11561. Docket 98-ANE-79-AD.

Applicability: General Electric Company (GE) CF6-80C2 series turbofan engines, with fan mid shafts, part number (P/N) 9326M74P04 or P/N 9326M74P05, installed. These engines are installed on but not limited to Airbus Industrie A300 and A310 series, Boeing 747 and 767 series, and McDonnell Douglas MD-11 series aircraft.

NOTE 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fan mid shaft failure, which could result in an uncontained engine failure and damage to the aircraft, accomplish the following:

(a) Remove from service affected fan mid shafts and replace with a serviceable part, as follows:

NOTE 2: GE CF6-80C2 Service Bulletin (SB) No. 72-958, dated December 10, 1998, contains information on this subject.

(1) For fan mid shafts that have accumulated 9,000 or more cycles-since-new (CSN) on the effective date of this AD, remove from service within 3,500 cycles-in-service (CIS) after the effective date of this AD, or prior to accumulating 15,000 CSN, whichever occurs first.

(2) For fan mid shafts that have accumulated 1,800 CSN or more, but less than 9,000 CSN on the effective date of this AD, remove from service within 5,000 CIS after the effective date of this AD, or prior to accumulating to 12,500 CSN, whichever occurs first.

(3) For fan mid shafts that have accumulated less than 1,800 CSN on the effective date of this AD, remove from service prior to accumulating 6,800 CSN.

NOTE 3: GE CF6-80C2 SB 72-750, Revision 2, dated September 4, 1998, contains information on reworking fan mid shafts that results in changing the P/N. After that rework, this AD would not apply to engines containing the reworked fan mid shaft.

New Life Limits

(b) Except for the provisions of paragraph (a) of this AD, no fan mid shafts, P/N 9326M74P04 or 9326M74P05, may remain in service beyond 6,800 CSN.

Alternate Method of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Ferry Flights

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

(e) This amendment becomes effective on April 10, 2000.

FOR FURTHER INFORMATION CONTACT:
William S. Ricci, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone: (781) 238-7742, fax: (781) 238-7199.

Issued in Burlington, Massachusetts, on February 2, 2000.
David A. Downey, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service

THE BOEING COMPANY
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-05 BOEING: Amendment 39-11562. Docket 96-NM-226-AD.

Applicability: Model 737-200 series airplanes equipped with SAF-T-GL0 Aerospace Limited emergency floor path lighting systems installed in accordance with Supplemental Type Certificate (STC) ST00969AT, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent inadequate lighting and cueing of the emergency floor path lighting system, which could delay or impede the flight crew and passengers when exiting the airplane during an emergency, accomplish the following:

(a) Within 6 months after the effective date of this AD, remove the existing photoluminescent emergency floor path lighting system from the airplane. Replace it with an emergency floor path lighting system in accordance with Supplemental Type Certificate ST01829AT, dated February 11, 1999, or an FAA-approved emergency floor path lighting system that is installed in accordance with a method approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(d) This amendment becomes effective on March 16, 2000.

FOR FURTHER INFORMATION CONTACT:
Eugene Evans, Aerospace Engineer, ACE-116A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6081; fax (770) 703-6097.

Issued in Renton, Washington, on February 4, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

ROLLS-ROYCE PLC
AIRWORTHINESS DIRECTIVE
ENGINE
LARGE AIRCRAFT

2000-03-07 ROLLS-ROYCE, plc: Amendment 39-11565. Docket 2000-NE-01-AD.

Applicability: Rolls-Royce plc (R-R) RB211-524H-36 series turbofan engines installed on but not limited to Boeing 767 series airplanes.

NOTE 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent burn through of the combustor case due to combustor liner cracking, which can result in an engine fire and damage to the aircraft, accomplish the following:

Installation of Improved Combustion Liner

(a) Prior to further flight, install an improved combustion liner with a strengthened head and improved heat shields, in accordance with the Accomplishment Instructions of R-R Service Bulletin (SB) No. RB.211-72-9764, Revision 3, dated January 16, 1998.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Engine Certification Office.

No Ferry Flights

(c) Special flight permits will not be issued.

Incorporation by Reference

(d) The actions required by this AD shall be performed in accordance with the following R-R SB:

Document No.	Pages	Revision	Date
RB.211-72-9764	1	3	January 16, 1998
	2	Original	August 20, 1993
	3-6	3	January 16, 1998
	7-10	Original	August 20, 1993
	11	3	January 16, 1998
	12-30	Original	August 20, 1993
	Total pages: 30		

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Rolls-Royce plc, PO Box 31, Derby, England; telephone: International Access Code 011, Country Code 44, 1332-249428, fax International Access Code 011, Country Code 44, 1332-249223. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(e) This amendment becomes effective on March 2, 2000.

FOR FURTHER INFORMATION CONTACT:
James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone: 781-238-7176; fax: 781-238-7199.

Issued in Burlington, Massachusetts, on February 7, 2000.
Thomas A. Boudreau, Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-08 MCDONNELL DOUGLAS: Amendment 39-11567. Docket 99-NM-210-AD.

Applicability: Model MD-90-30 airplanes, as listed in McDonnell Douglas Service Bulletin MD90-32-012, Revision 01, dated June 2, 1998; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of main landing gear (MLG) pistons, which could result in failure of the pistons, and consequent damage to the airplane structure and injury to flight crew, passengers, or ground personnel, accomplish the following:

Inspection of MLG Piston Part Number 5935347-509

(a) For MLG pistons, part number (P/N) 5935347-509: Perform fluorescent penetrant and magnetic particle inspections to detect fatigue cracking of the MLG pistons, in accordance with McDonnell Douglas Service Bulletin MD90-32-012, dated May 19, 1997; or Revision 01, dated June 2, 1998, at the later of the times specified in paragraphs (a)(1) and (a)(2) of this AD. Repeat the inspections thereafter at intervals not to exceed 2,500 landings.

(1) Prior to the accumulation of 4,000 landings; or

(2) Within 2,500 landings or 12 months after the effective date of this AD whichever occurs first.

Inspection of MLG Piston Part Numbers 5935347-511 and -513

(b) For MLG pistons P/N's 5935347-511 and -513: Within 5,000 landings after the effective date of this AD, perform fluorescent penetrant and magnetic particle inspections to detect fatigue cracking of the MLG pistons, in accordance with McDonnell Douglas Service Bulletin MD90-32-012, dated May 19, 1997; or Revision 01, dated June 2, 1998. Repeat the inspections thereafter at intervals not to exceed 5,000 landings.

Repair

(c) If any crack is found during any inspection required by this AD: Repair in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (c) of this AD, the actions shall be done in accordance with McDonnell Douglas Service Bulletin MD90-32-012, dated May 19, 1997; or McDonnell Douglas Service Bulletin MD90-32-012, Revision 01, dated June 2, 1998. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(g) This amendment becomes effective on March 22, 2000.

FOR FURTHER INFORMATION CONTACT:
Carl Fountain, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5222; fax (562) 627-5210.

Issued in Renton, Washington, on February 8, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-10 MCDONNELL DOUGLAS: Amendment 39-11569. Docket 99-NM-168-AD. Supersedes AD 98 25-11 R1, Amendment 39-10988.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletins MD11-25A194, Revision 05, dated June 21, 1999, and MD11-24A068, Revision 01, dated March 8, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent chafing of certain electrical wires above the forward passenger doors, which could result in an electrical fire in the passenger compartment, accomplish the following:

RESTATEMENT OF THE REQUIREMENTS OF AD 98-25-11 R1

Detailed Visual Inspection

(a) Within 10 days after December 28, 1998 (the effective date of AD 98-25-11 R1, amendment 39-10988), perform a detailed visual inspection of the aircraft wiring to detect discrepancies that include but are not limited to frayed, chafed, or nicked wires and wire insulation in the areas specified in paragraphs (a)(1) and (a)(2) of this AD.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) At the area of the forward drop ceiling just outboard of mod block S3-735, and forward and inboard of the light ballast for the entry light on the sliding ceiling panel above the forward left passenger door (1L) at station location x = 24.75, y = 435, and z = 64.5.

(2) At the area above the forward right passenger door (1R) at station location x= -30, y = 430, and z = 70 in the ramp deflector assembly part number 4223570-501.

Corrective Action

(b) If any discrepancy is detected during the visual inspection required by paragraph (a) of this AD, prior to further flight, repair in accordance with Chapter 20, Standard Wiring Practices of the MD-11 Wiring Diagram Manual, dated January 1, 1998, or April 1, 1998.

NEW REQUIREMENTS OF THIS AD

Inspection, Installation, and Modification

(c) Within 6 months after the effective date of this AD, accomplish the actions specified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD, as applicable.

(1) For Group 1 airplanes listed in McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999: Install a ramp deflector assembly on the right side forward entry drop ceiling structure in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999.

(2) For Group 2 airplanes listed in McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999: Install a ramp deflector assembly on the right side forward entry drop ceiling structure in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999.

NOTE 3: Installation of a ramp deflector assembly in accordance with McDonnell Douglas Service Bulletin MD11-25-194, dated March 15, 1996; Revision 01, dated May 1, 1996; Revision 02, dated July 12, 1996; Revision 03, dated December 12, 1996; or Revision 04, dated March 8, 1999, is acceptable for compliance with the requirements of paragraph (c)(2) of this AD.

(3) For Group 3 airplanes listed in McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999: Modify the previously installed ramp deflector assembly bracket in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999.

(4) For airplanes listed in McDonnell Douglas Alert Service Bulletin MD11-24A068, Revision 01, dated March 8, 1999: Perform a general visual inspection of the wire assembly support installation for evidence of chafing, in accordance with the service bulletin. If any chafing is detected, prior to further flight, repair or replace any discrepant part with a new part in accordance with the service bulletin.

NOTE 4: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being check."

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraphs (a) and (b) of this AD, the actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999; or McDonnell Douglas Alert Service Bulletin MD11-24A068, Revision 01, dated March 8, 1999; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(g) This amendment becomes effective on March 23, 2000.

FOR FURTHER INFORMATION CONTACT:

Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on February 10, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-11 MCDONNELL DOUGLAS: Amendment 39-11570. Docket 99-NM-169-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11-30A020, Revision 03, dated May 5, 1999, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent burnt internal circuit boards caused by a short in either the engine or airfoil anti-ice valve, or windshield anti-ice controller, which could result in smoke in the cockpit, accomplish the following:

Replacement and Modification

(a) Within 1 year after the effective date of this AD, replace the 10 amp circuit breakers with 5 amp circuit breakers in the left and right windshield anti-ice power controllers, and accomplish either paragraph (a)(1) or (a)(2) of this AD, in accordance with McDonnell Douglas Alert Service Bulletin MD11-30A020 Revision 03, dated May 5, 1999.

(1) **Option 1.** Replace the anti-ice control panel and return the panel to Honeywell Inc. for modification and reidentification in accordance with Option 1 of the service bulletin.

(2) **Option 2.** Modify and reidentify the anti-ice control panel in accordance with Option 2 of the service bulletin.

NOTE 2: Replacements, modifications, and reidentifications accomplished prior to the effective date of this AD in accordance with McDonnell Douglas Service Bulletin MD11-30-020, dated March 6, 1995; Revision 01, dated February 20, 1996; or Revision 02, dated August 25, 1997; are considered acceptable for compliance with the requirements of paragraph (a) of this AD.

Spares

(b) As of the effective date of this AD, no person shall install an anti-ice control panel, part number 4059030-901 or -902, on any airplane, unless it has been modified and reidentified as part number 4059030-911 or -912, in accordance with paragraph (a)(1) or (a)(2) of this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-30A020 Revision 03, dated May 5, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on March 23, 2000.

FOR FURTHER INFORMATION CONTACT:

Brett Portwood, Technical Specialist, Systems Safety and Integration, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on February 10, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-12 MCDONNELL DOUGLAS: Amendment 39-11571. Docket 99-NM-170-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Service Bulletin MD11-24-128, Revision 1, dated July 30, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent loss of the charging capability of the air driven generator (ADG), that when coupled with a loss of all normal electrical power, could prevent continued safe flight and landing of the airplane, accomplish the following:

Replacement

(a) Within 1 year after the effective date of this AD, replace the ADG wire assembly, part number (P/N) ACS9006-501, with a new, increased length wire assembly, P/N ACS9006-502, in accordance with McDonnell Douglas Service Bulletin MD11-24-128, dated September 17, 1998, or Revision 1, dated July 30, 1999.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The replacement shall be done in accordance with McDonnell Douglas Service Bulletin MD11-24-128, dated September 17, 1998, or McDonnell Douglas Service Bulletin MD11-24-128, Revision 01, dated July 30, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on March 23, 2000.

FOR FURTHER INFORMATION CONTACT:
Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on February 10, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-13 MCDONNELL DOUGLAS: Amendment 39-11572. Docket 99-NM-171-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11-24A041, Revision 01, dated April 26, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent the wire bundle contained in the feedthrough from contacting the bottom of the feedthrough which could cause cable chafing, electrical arcing, and smoke or fire in the cockpit, accomplish the following:

Inspection and Modification

(a) Within 1 year after the effective date of this AD, perform a one-time detailed visual inspection of the wire bundle installation behind the first observer's station to detect damaged or chafed wires, in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A041, Revision 01, dated April 26, 1999.

NOTE 2: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

(1) For airplanes identified as Group 1 in the service bulletin: Accomplish paragraph (a)(1)(i) or (a)(1)(ii) of this AD, as applicable.

(i) If no damaged or chafed wire is found, no further action is required by this AD.

(ii) If any damaged or chafed wire is found, prior to further flight, repair in accordance with the service bulletin;

(2) For airplanes identified as Group 2 in the service bulletin: Accomplish paragraph (a)(2)(i) or (a)(2)(ii) of this AD, as applicable.

(i) If no damaged or chafed wire is found, within 1 year after the effective date of this AD, revise the wire bundle support clamp installation at the observer's station in accordance with the service bulletin.

(ii) If any damaged or chafed wire is found, prior to further flight, repair the wiring, and revise the wire bundle support clamp installation at the observer's station in accordance with the service bulletin.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A041, Revision 01, dated April 26, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on March 23, 2000.

FOR FURTHER INFORMATION CONTACT:
Brett Portwood, Technical Specialist, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax(562) 627-5210.

Issued in Renton, Washington, on February 10, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-14 MCDONNELL DOUGLAS: Amendment 39-11573. Docket 99-NM-172-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11-24A141, Revision 01, dated August 23, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent arcing of the battery ground studs, which could cause smoke and/or fire in the center accessory compartment, accomplish the following:

(a) For airplanes on which McDonnell Douglas Service Bulletin MD11-24-090, dated August, 28, 1997; Revision 1, dated June 10, 1998; or Revision 2, dated May 17, 1999; has not been accomplished: Within 1 year after the effective date of this AD, accomplish the modification of the battery ground cable installation in the center accessory compartment specified in paragraph (a)(1) or (a)(2) of this AD, in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A141, dated May 17, 1999, or Revision 01, dated August 23, 1999.

(1) Option 1 (Bracket Assembly Modification). Modify, reidentify, and install a modified bracket assembly; trim the nameplate; plug open holes; install the support assembly and clamp; and connect the battery ground cable with improved attachments.

(2) Option 2 (Bracket Assembly Replacement). Install a new bracket assembly; plug open holes; install the support assembly and clamp; and connect the battery ground cable with improved attachments.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The modification and replacement shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A141, dated May 17, 1999, or McDonnell Douglas Alert Service Bulletin MD11-24A141, Revision 01, dated August 23, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on March 23, 2000.

FOR FURTHER INFORMATION CONTACT:
Brett Portwood, Technical Specialist, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on February 10, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-15 MCDONNELL DOUGLAS: Amendment 39-11574. Docket 99-NM-173-AD.

Applicability: Model MD-11 and MD-11F series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11-24A150, dated March 25, 1999, and McDonnell Douglas Alert Service Bulletin MD11-24A147, dated March 24, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent electrical arcing caused by power feeder cable terminal lugs grounding against terminal strip support brackets, which could result in smoke and fire in the main cabin or avionics compartment, accomplish the following:

Replacement of Terminal Strips and Supports

(a) For airplanes listed in the effectivity of McDonnell Douglas Alert Service Bulletin MD11-24A150, dated March 25, 1999, on which the modification specified in McDonnell Douglas Service Bulletin MD11-24-085, dated August 1, 1995, has not been accomplished: Within 1 year after the effective date of this AD, replace the existing terminal strips and supports above the main cabin at station Y=5-32.000 with new terminal strips and supports in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A150, dated March 25, 1999.

Installation of Spacers

(b) For airplanes listed in the effectivity of McDonnell Douglas Alert Service Bulletin MD11-24A147, dated March 24, 1999: Within 6 months after the effective date of this AD, install spacers between terminal strips and mounting brackets in the avionics compartment in accordance with the service bulletin.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The replacement and installation shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A150, dated March 25, 1999; and McDonnell Douglas Alert Service Bulletin MD11-24A147, dated March 24, 1999; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on March 23, 2000.

FOR FURTHER INFORMATION CONTACT:
Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on February 10, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-16 MCDONNELL DOUGLAS: Amendment 39-11575. Docket 99-NM-174-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11-24A071, Revision 01, dated May 20, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent the threaded insert connector from pulling free from the casing of the 90 percent brake pedal position switch and burning through the nose wheel steering cable, which could result in reduced aircraft directional control while on the ground, accomplish the following:

(a) For airplanes on which McDonnell Douglas Service Bulletin MD11-24-71, dated June 29, 1994, has not been accomplished: Within 12 months after the effective date of this AD, perform a one-time visual inspection of the 90 percent brake pedal position switch to determine the manufacturer's date code, in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A071, Revision 01, dated May 20, 1999.

(1) If no manufacturer's date code 8944 through 9033 inclusive is found on the 90 percent brake pedal position switch, no further action is required by this AD.

(2) If any manufacturer's date code 8944 through 9033 inclusive is found on the 90 percent brake pedal position switch, prior to further flight, replace the 90 percent brake pedal position switch with a new switch, in accordance with the service bulletin.

(b) As of the effective date of this AD, no person shall install a 90 percent brake pedal switch that has a manufacturer's date code of 8944 through 9033 inclusive, on any airplane.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A071, Revision 01, dated May 20, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on March 23, 2000.

FOR FURTHER INFORMATION CONTACT:
Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on February 10, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

FAIRCHILD AIRCRAFT INC
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-17 FAIRCHILD AIRCRAFT, INC.: Amendment 39-11576; Docket No. 99-CE-59-AD, Supersedes AD 97-23-01, Amendment 39-10188; which superseded AD 93-15-02 R2, Amendment 39-9689; which revised AD 93-15-02 R1, Amendment 39-9180; which revised AD 93-15-02, Amendment 39-8648.

Applicability: All SA226 and SA227 series airplanes (all models and serial numbers), certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated in the body of this AD, unless already accomplished.

To detect excessive freeplay or rod slippage in the pitch trim actuator, which, if not detected and corrected, could result in pitch trim actuator failure and possible loss of control of the airplane, accomplish the following:

NOTE 2: The paragraph structure of this AD is as follows:

Level 1: (a), (b), (c), etc.
Level 2: (1), (2), (3), etc.
Level 3: (i), (ii), (iii), etc.

Level 2 and Level 3 structures are designations of the Level 1 paragraph they immediately follow.

(a) Accomplish the following at the times specified in the chart in paragraph (b) of this AD:

(1) Initial and repetitive inspections:

(i) For airplanes equipped with a Simmonds-Precision actuator, P/N DL5040M5, P/N DL5040M6, or P/N DL5040M8, measure the freeplay (inspection) of the pitch trim actuator and inspect the actuator for rod slippage in accordance with the INSTRUCTIONS section of Fairchild Aircraft SA226 Series Service Letter (SL) 226-SL-005, or Fairchild Aircraft SA227 Series SL 227-SL-011, both Revised: August 3, 1999; or Fairchild Aircraft SA227 Series Service Letter CC7-SL-028, Issued: August 12, 1999, as applicable.

(ii) For airplanes equipped with Barber-Colman actuators, P/N 27-19008-00-001, P/N 27-19008-002, P/N 27-19008-00-004, or P/N 27-19008-005, conduct a functional inspection of the actuator in accordance with the INSTRUCTIONS section of Fairchild Aircraft SA226 Series SL 226-SL-014, Revised: February 1, 1999, Fairchild Aircraft SA227 Series SL 227-SL-031, Revised: February 1, 1999, or Fairchild Aircraft SA227 Series SL CC7-SL-021, Revised: February 1, 1999, whichever is applicable.

NOTE 3: The actions in this AD are the same as the actions in AD 97-23-01, except for the actions added to the airplanes equipped with improved design pitch trim actuators.

(2) Initial and repetitive replacements: Replace the pitch trim actuator with any of the pitch trim actuators presented in the Chart in paragraph (b) of this AD, as applicable, at the time specified in the Repetitive Replacement column of this chart. However, if certain freeplay limitations that are specified in the service letters are exceeded or if rod slippage is found, prior to further flight, replace the pitch trim actuator.

(b) The following chart presents the pitch trim actuator that could be installed and the initial and repetitive inspection and replacement compliance times of this AD:

Condition	Initial Inspection	Repetitive Inspection	Repetitive Replacement
For all affected airplane models, except for the Models SA227-CC and SA227-DC, with an original Simmonds-Precision actuator, P/N DL5040M5, installed.	Upon accumulating 3,000 hours TIS on a Simmonds-Precision P/N DL5040M5 actuator or within 50 hours TIS after April 17, 1995 (the effective date of AD 93-15-02 R1), whichever occurs later.	Every 250 hours TIS after the initial inspection until accumulating 5,000 hours TIS on the actuator or 500 hours TIS after the last inspection required by AD 93-15-02 R1, whichever occurs later.	Initially upon accumulating 5,000 hours TIS on the actuator or 500 hours TIS after the initial inspection, whichever occurs later, and thereafter as indicated below.

Condition	Initial Inspection	Repetitive Inspection	Repetitive Replacement
For all affected airplane models, except for the Models SA227-CC and SA227-DC, with a replacement Simmonds-Precision actuator, P/N DL5040M5, installed.	Initially upon accumulating 5,000 hours TIS on the new actuator or within 50 hours TIS after April 17, 1995 (the effective date of AD 93-15-02 R1), whichever occurs later.	Every 300 hours TIS after the initial inspection until accumulating 6,500 hours TIS on the actuator.	Upon accumulating 6,500 hours TIS on the actuator.
For all affected airplane models, except for the Models SA227-CC and SA227-DC, with a replacement Simmonds-Precision actuator, P/N DL5040M6, installed. This part can be new, modified from a P/N DL5040M5 actuator, or overhauled and zero-timed.	Initially upon accumulating 7,500 hours TIS on the new or modified actuator or within 50 hours TIS after April 17, 1995 (the effective date of AD 93-15-02 R1), whichever occurs later.	Every 300 hours TIS after the initial inspection until accumulating 9,900 Hours TIS on the actuator.	Upon accumulating 9,900 hours TIS on the actuator.
For all affected airplane models, except for the Models SA227-CC and SA227-DC, with a replacement Simmonds-Precision actuator, P/N DL5040M5, installed that was overhauled and zero-timed where both nut assemblies, P/N AA56142, were replaced with new assemblies during overhaul.	Initially upon accumulating 5,000 hours TIS on the over-hauled actuator or within 50 hours TIS after April 17, 1995 (the effective date of AD 93-15-02 R1), whichever occurs later.	Every 300 hours TIS after the initial inspection until Accumulating 6,500 hours TIS on the actuator.	Upon accumulating 6,500 hours TIS on the actuator.
For all affected airplane models, except for the Models SA227-CC and SA227-DC, with a replacement P/N DL5040M5 actuator installed that was overhauled and zero-timed where both nut assemblies, P/N AA56142, were not replaced with new assemblies during overhaul.	Initially upon accumulating 3,000 hours TIS on the over-hauled actuator or within 50 hours TIS after April 17, 1995 (the effective date of AD 93-15-02 R1), whichever occurs later.	Every 250 hours TIS after the initial inspection until accumulating 5,000 hours TIS on the actuator.	Upon accumulating 5,000 hours TIS on the actuator.
For all affected airplane models with a newly fabricated or over-hauled and zero-timed Barber-Colman actuator, P/N 27-19008-001/-004 or P/N 27-19008-002/-005.	Upon accumulating 500 hours total TIS on the newly fabricated or over-hauled and zero-timed actuator or within 50 hours TIS after the effective date of AD 97-23-01, whichever occurs later.	Every 300 hours TIS after the initial inspection.	None.
For the Models SA227-CC and SA227-DC only, with a Simmonds-Precision pitch trim actuator, P/N DL5040M5 or P/N DL5040M6, installed	None.	None.	Upon accumulating 1,500 hours TIS on the actuator.

Condition	Initial Inspection	Repetitive Inspection	Repetitive Replacement
For all affected airplanes with a Barber-Colman P/N 27-19008-006 or 27-19008-007 actuator installed.	Must be overhauled upon the accumulation of 2,000 hours TIS on the actuator	Must be overhauled at intervals not to exceed 2,000 hours TIS.	No replacement requirements.
For all affected airplanes with a Simmonds-Precision pitch trim actuator, P/N DL5040M8, installed	Upon accumulating 7,500 hours TIS on the actuator or within the next 50 hours TIS after the effective date of this AD, whichever occurs later.	Every 600 hours TIS after the initial inspection until accumulating 9,900 hours TIS.	Upon accumulating 9,900 hours TIS on the actuator.

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(d) An alternative method of compliance or adjustment of the initial or repetitive compliance times that provides an equivalent level of safety may be approved by the Manager, Airplane Certification Office (ACO), FAA, 2601 Meacham Boulevard, Fort Worth, Texas 76193-0150.

(1) The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Fort Worth Airplane Certification Office.

(2) Alternative methods of compliance that were approved in accordance with AD 97-23-01 are considered to be approved as alternative methods of compliance with this AD.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Fort Worth Airplane Certification Office.

(e) (1) The inspections required by this AD shall be done in accordance with the following:

(i) Fairchild Aircraft SA226 Series SL 226-SL-005, Revised: August 3, 1999; or

(ii) Fairchild Aircraft SA227 Series SL 227-SL-011; Revised: August 3, 1999; or

(iii) Fairchild Aircraft SA227 Series SL CC7-SL-028, Issued: August 12, 1999; and

(iv) Fairchild Aircraft SA226 Series SL 226-SL-014, Revised: February 1, 1999; or

(v) Fairchild Aircraft SA227 Series SL 227-SL-031, Revised: February 1, 1999; or

(vi) Fairchild Aircraft SA227 Series SL CC7-SL-021, Revised: February 1, 1999.

(2) This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Field Support Engineering, Fairchild Aircraft Inc., P.O. Box 790490, San Antonio, Texas 78279-0490. Copies may be inspected at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 301, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(f) This amendment supersedes 97-23-01, Amendment 39-10188; which superseded AD 93-15-02 R2, Amendment 39-9689; which revised AD 93-15-02 R1, Amendment 39-9180; which revised AD 93-15-02, Amendment 39-8648.

(g) This amendment becomes effective on April 10, 2000.

FOR FURTHER INFORMATION CONTACT:

Mr. Werner Koch, Aerospace Engineer, FAA, Airplane Certification Office, 2601 Meacham Boulevard, Fort Worth, Texas 76193-0150; telephone: (817) 222-5133; facsimile: (817) 222-5960.

Issued in Kansas City, Missouri, on February 9, 2000.

Michael K. Dahl, Acting Manager, Small Airplane Directorate, Aircraft Certification Service

AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-20 AIRBUS INDUSTRIE: Amendment 39-11580. Docket 95-NM-150-AD.

Applicability: All Model A300-600 airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking on the forward fittings in the radius of frame 40 adjacent to the tension bolts in the center section of the wings, which could result in reduced structural integrity of the wings, accomplish the following:

Inspections and Corrective Actions

(a) Perform an ultrasonic inspection to detect cracking on the forward fittings in the radius of frame 40 adjacent to the tension bolts in the center section of the wings, in accordance with Airbus Service Bulletin A300-57-6062, Revision 02, dated January 29, 1997, at the applicable time specified in either paragraph (a)(1) or (a)(2) of this AD.

(1) For airplanes that have accumulated fewer than 9,100 total landings or 22,300 total flight hours as of the effective date of this AD: Inspect at the later of the times specified in either paragraph (a)(1)(i) or (a)(1)(ii) of this AD.

(i) Prior to the accumulation of 7,250 total landings or 17,700 total flight hours, whichever occurs first.

(ii) Within 1,500 landings after the effective date of this AD.

(2) For airplanes that have accumulated 9,100 total landings or more and 22,300 total flight hours or more as of the effective date of this AD: Inspect within 750 landings after the effective date of this AD.

NOTE 2: Inspections that were accomplished prior to the effective date of this AD in accordance with Airbus Service Bulletin A300-57-6062, Revision 1, dated July 23, 1995, are considered acceptable for compliance with paragraph (a) of this AD.

(b) If no crack is detected during the inspection required by paragraph (a) of this AD, repeat the ultrasonic inspection required by that paragraph thereafter at intervals not to exceed 6,500 landings or 16,000 flight hours, whichever occurs first; in accordance with Airbus Service Bulletin A300-57-6062, Revision 02, dated January 29, 1997.

(c) If any crack is detected during any inspection required by paragraph (a) or (b) of this AD, prior to further flight, install an access door, and perform an eddy current inspection to confirm the presence of a crack; in accordance with Airbus Service Bulletin A300-57-6062, Revision 02, dated January 29, 1997. Accomplishment of this eddy current inspection terminates the repetitive inspection requirement of paragraph (b) of this AD.

(1) If no crack is detected during the eddy current inspection, repeat the eddy current inspection, in accordance with the service bulletin, thereafter at intervals not to exceed 6,500 landings or 16,000 flight hours, whichever occurs first.

(2) If any crack is detected during any eddy current inspection performed in accordance with paragraph (c) or (c)(1) of this AD, prior to further flight, blend out the crack and repeat the eddy current inspection in accordance with the service bulletin.

(i) If the eddy current inspection performed after the blend-out shows that the crack has been removed, and if the blend-out is equal to or less than 50 millimeters (mm) long and equal to or less than 2 mm deep, thereafter repeat the eddy current inspection at intervals not to exceed 2,800 landings or 7,000 flight hours, whichever occurs first.

(ii) If the eddy current inspection performed after the blend-out shows that the crack has not been removed, or if the blend-out is more than 50 mm long or more than 2 mm deep, prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate; or the Direction Générale de l'Aviation Civile (or its delegated agent).

Alternative Methods of Compliance

(d) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

(2) Operators may request an extension to the compliance times of this AD in accordance with the "adjustment-for-range" formula found in Paragraph 1.B.(5) of Airbus Service Bulletin A300-57-6062, Revision 02, dated January 29, 1997; and provided in A300-600 Maintenance Review Board, Section 5, Paragraph 5.4. The average flight time per flight cycle (landing) in hours used in this formula should be for an individual airplane. Average flight time for a group of airplanes may be used if all airplanes of the group have flight times differing by no more than 10 percent. If compliance times are based on the average flight time for a group of airplanes, the flight times for individual airplanes of the group must be included for FAA review.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as required by (c)(2)(ii) of this AD, the actions shall be done in accordance with Airbus Service Bulletin A300-57-6062, Revision 02, dated January 29, 1997, which contains the specified effective pages:

Page Number	Revision Level Shown on Page	Date Shown on Page
1-34, 37	02	January 29, 1999
35, 36	1	July 23, 1995

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in French airworthiness directive 95-063-177(B)R3, dated July 2, 1997.

(g) This amendment becomes effective on March 28, 2000.

FOR FURTHER INFORMATION CONTACT:
Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 11, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

THE BOEING COMPANY
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-21 BOEING: Amendment 39-11581. Docket 98-NM-193-AD.

Applicability: Model 767 airplanes, as listed in Boeing Service Bulletin 767-32A0163, Revision 1, dated October 1, 1998; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent interference between the landing gear control lever and wire bundles adjacent to the landing gear control lever module, and to prevent wire chafing and arcing between the landing gear control cable and adjacent wire bundles, which could result in the inability to extend the landing gear prior to landing, accomplish the following:

Detailed Visual Inspection

(a) Within 90 days after the effective date of this AD, perform a one-time detailed visual inspection to detect discrepancies (i.e., cut, abrasion, fraying, and arcing) of the wire expando sleeve of the wire bundles adjacent to the landing gear control lever module, in accordance with Boeing Alert Service Bulletin 767-32A0163, dated March 5, 1998, or Boeing Service Bulletin 767-32A0163, Revision 1, dated October 1, 1998.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate by the inspector. Inspection aids such as mirrors, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

NOTE 3: Boeing Service Bulletin 767-32A0163, Revision 1, dated October 1, 1998, specifies the preferred procedures for separating the wire bundles into two groups for wrapping, which is an easier method for accomplishing those actions.

Follow-on Actions, Repair, and Wire Wrapping

(1) If no discrepancy of the wire expando sleeve is detected, prior to further flight, wrap the wire expando sleeve in accordance with the alert service bulletin or Revision 1.

(2) If any discrepancy of the wire expando sleeve is detected, prior to further flight, perform a detailed visual inspection to detect discrepancies of the varglas layer, in accordance with the alert service bulletin or Revision 1.

(i) If no discrepancy of the varglas layer is detected, prior to further flight, repair and wrap the wire expando sleeve in accordance with the alert service bulletin or Revision 1.

(ii) If any discrepancy of the varglas layer is detected, prior to further flight, perform a detailed visual inspection to detect discrepancies of the wire bundles, in accordance with the alert service bulletin or Revision 1.

(A) If no discrepancy of the wire bundles is detected, prior to further flight, rewrap the wires with new varglas layer, and repair and wrap the wire expando sleeve in accordance with the alert service bulletin or Revision 1.

(B) If any discrepancy of the wire bundles is detected, prior to further flight, repair the wires, rewrap the wire bundles with new varglas layer, and repair and wrap the wire expando sleeve in accordance with the alert service bulletin or Revision 1.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with Boeing Alert Service Bulletin 767-32A0163, dated March 5, 1998, or Boeing Service Bulletin 767-32A0163, Revision 1, dated October 1, 1998. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on March 28, 2000.

FOR FURTHER INFORMATION CONTACT:

Elias Natsiopoulos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1279; fax (425) 227-1181.

Issued in Renton, Washington, on February 11, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

THE BOEING COMPANY
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-03-22 BOEING: Amendment 39-11582. Docket 98-NM-339-AD.

Applicability: Model 747-100, -200, and 747SP series airplanes; line numbers 1 through 567 inclusive; equipped with aluminum diagonal brace underwing fittings; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent loss of the underwing fitting load path due to missing, damaged, or broken taperlock bolts, which could result in separation of the engine and strut from the airplane, accomplish the following:

Repetitive Inspections

(a) Prior to the accumulation of 9,000 total flight cycles, or within 18 months after the effective date of this AD, whichever occurs later, accomplish the actions required by paragraphs (a)(1) and (a)(2) of this AD in accordance with Boeing Alert Service Bulletin 747-57A2308, dated August 6, 1998. Thereafter, repeat the inspections at intervals not to exceed 18 months until accomplishment of the actions specified in paragraph (d) of this AD.

(1) Perform a detailed visual inspection to detect missing taperlock bolts in the diagonal brace underwing fitting at the Number 1 and Number 4 pylons.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(2) Perform an ultrasonic inspection to detect damaged or broken taperlock bolts in the diagonal brace underwing fitting at the Number 1 and Number 4 pylons.

Corrective Actions

(b) If any missing, damaged, or broken taperlock bolt is detected during any inspection required by paragraph (a) of this AD, prior to further flight, perform the applicable corrective actions (i.e., inspection, drill/ream, and replacement) in accordance with Boeing Alert Service Bulletin 747-57A2308, dated August 6, 1998; except as provided in paragraph (c) of this AD. Replacement of any taperlock bolt with a new bolt in accordance with this paragraph constitutes terminating action for the repetitive inspections required by paragraph (a) of this AD for that bolt only.

(c) If any crack is detected during the inspection required by paragraph (b) of this AD and the damage to a bolt hole exceeds first oversize (for 0.5-inch bolts) or second oversize (for 0.4375-inch bolts); and the service bulletin specifies to contact Boeing for appropriate action: Prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

Terminating Action

(d) Within 48 months after the effective date of this AD, accomplish the actions required by paragraphs (d)(1) and (d)(2) of this AD in accordance with Boeing Alert Service Bulletin 747-57A2308, dated August 6, 1998. Accomplishment of the actions specified in this paragraph constitutes terminating action for the repetitive inspection requirements of this AD.

(1) Prior to accomplishing the replacement required by paragraph (d)(2) of this AD, perform an open hole high frequency eddy current inspection to detect cracks at the bolt hole locations of the aft 10 taperlock bolts. If any cracking is detected, prior to further flight, perform applicable corrective actions in accordance with paragraph (c) of this AD.

(2) Replace the aft 10 taperlock bolts with new bolts in the diagonal brace underwing fitting at the Number 1 and Number 4 pylons.

NOTE 3: Accomplishment of the replacement of the diagonal brace underwing fitting in accordance with Figures 5 through 9 of Boeing Service Bulletin 747-57-2288, Revision 1, dated June 26, 1997; or the clearance adjustment in accordance with Figures 10 through 14 of that service bulletin; is acceptable for compliance with the requirements of paragraph (d) of this AD.

Spares

(e) As of the effective date of this AD, no person shall install a bolt, part number BACB30PE( ) * ( ), or any other bolt made of 4340, 8740, or PH13-8 Mo steel, in the locations specified in this AD, on any airplane listed in the applicability of this AD.

Alternate Method of Compliance

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(h) Except as provided in paragraph (c) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 747-57A2308, dated August 6, 1998. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P. O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(i) This amendment becomes effective on March 28, 2000.

FOR FURTHER INFORMATION CONTACT:

Tamara L. Anderson, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2771; fax (425) 227-1181.

Issued in Renton, Washington, on February 11, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

THE BOEING COMPANY
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-04-02 BOEING: Amendment 39-11584. Docket 98-NM-150-AD.

Applicability: Model 737-100, -200, -300, -400, and -500 series airplanes; line numbers 1 through 3002 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fuel suction feed operation on both engines without flight crew indication, and possible consequent multiple engine power loss, accomplish the following:

Requirements for Airplanes Equipped with GEC Boost Pumps:

(a) For airplanes equipped with one or more main tank fuel boost pumps manufactured by the General Electric Company (GEC), of the United Kingdom: Accomplish paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this AD.

(1) As of the effective date of this AD, no airplane shall be dispatched with any main tank fuel boost pump inoperative unless the initial testing and any follow-on corrective actions required by paragraph (a)(2) of this AD have been accomplished on the operative pump in that main tank.

(2) Test each GEC-manufactured main tank fuel boost pump to determine the output pressure, in accordance with Boeing Alert Service Bulletin 737-28A1114, Revision 1, dated April 2, 1998; at the later of the times specified in paragraphs (a)(2)(i) and (a)(2)(ii) of this AD. If the fuel boost pump output pressure measured during the testing required by this paragraph is less than 23 pounds per square inch gauge (psig), as measured at the input to the engine fuel pump; or less than 36 psig, as measured at the fuel boost pump low pressure switch; prior to further flight, replace the fuel boost pump with a new or serviceable fuel pump, in accordance with the alert service bulletin.

(i) Prior to the accumulation of 3,000 total flight hours, or within 1 year since date of manufacture of the airplane, whichever occurs first; or

(ii) Within 90 days after the effective date of this AD.

(3) Repeat the testing required by paragraph (a)(2) of this AD thereafter at intervals not to exceed 6 months, until accomplishment of the requirements of paragraph (a)(4) of this AD.

(4) Within 2 years after the effective date of this AD, replace all four low pressure switches installed downstream of the main tank fuel boost pumps with higher threshold low pressure switches, in accordance with Boeing Alert Service Bulletin 737-28A1114, Revision 1, dated April 2, 1998. Accomplishment of this replacement constitutes terminating action for the requirements of paragraphs (a)(1), (a)(2), and (a)(3) of this AD.

Requirements for Airplanes Equipped with non-GEC boost pumps:

(b) For airplanes other than those identified in paragraph (a) of this AD: Within 2 years after the effective date of this AD, replace all four low pressure switches installed downstream of the main tank fuel boost pumps with higher threshold low pressure switches, in accordance with Boeing Alert Service Bulletin 737-28A1114, Revision 1, dated April 2, 1998.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The tests and replacements shall be done in accordance with Boeing Alert Service Bulletin 737-28A1114, Revision 1, dated April 2, 1998. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on March 29, 2000.

FOR FURTHER INFORMATION CONTACT:

Dorr Anderson, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2684; fax (425) 227-1181.

Issued in Renton, Washington, on February 14, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-04-03 MCDONNELL DOUGLAS: Amendment 39-11585. Docket 99-NM-139-AD.

Applicability: Models DC-3 and DC-4 series airplanes equipped with pneumatic deicing boots, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To ensure that flightcrews activate the wing and tail pneumatic deicing boots at the first signs of ice accumulation on the airplane, accomplish the following:

NOTE 1: For the purposes of this AD, the following definitions of "older" and "modern" apply:

"Modern" pneumatic boot systems may be characterized by short segmented, small diameter tubes, which are operated at relatively high pressures [18-23 pounds per square inch (psi)] by excess bleed air that is provided by turbine engines. "Older" pneumatic boot systems may be characterized by long, uninterrupted, large diameter tubes, which were operated at low pressures by engine driven pneumatic pumps whose pressure varied with engine revolutions per minute (rpm). This low pressure coupled with long and large diameter tubes caused early de-ice systems to have very lengthy inflation and deflation cycles and dwell times. (Dwell time is the period of time that the boot remains fully expanded following the completion of the inflation cycle until the beginning of the deflation cycle.)

(a) Within 10 days after the effective date of this AD: Perform a visual inspection to determine if the type of pneumatic deicing boots installed is either "older" or "modern" boots.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) For those airplanes equipped with "older" pneumatic deicing boots, no further action is required by this AD.

(2) For those airplanes equipped with "modern" pneumatic deicing boots, within 10 days after the inspection required by paragraph (a) of this AD: Revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following requirements for activation of the ice protection systems. This may be accomplished by inserting a copy of this AD in the AFM.

"• Except for certain phases of flight where the AFM specifies that deicing boots should not be used (e.g., take-off, final approach, and landing), compliance with the following is required.

- Wing and Tail Leading Edge Pneumatic Deicing Boot System, if installed, must be activated:

- At the first sign of ice formation anywhere on the aircraft, or upon annunciation from an ice detector system, whichever occurs first; and

- The system must either be continued to be operated in the automatic cycling mode, if available; or the system must be manually cycled as needed to minimize the ice accretions on the airframe.

- The wing and tail leading edge pneumatic deicing boot system may be deactivated only after leaving icing conditions and after the airplane is determined to be clear of ice."

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office, Transport Airplane Directorate. The request shall be forwarded through an appropriate FAA Operations Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(d) This amendment becomes effective on March 28, 2000.

FOR FURTHER INFORMATION CONTACT:
Albert Lam, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5346; fax (562) 627-5210.

Issued in Renton, Washington, on February 14, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service

FOKKER SERVICES BV
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-04-04 FOKKER SERVICES B.V.: Amendment 39-11586. Docket 99-NM-325-AD.

Applicability: All Model F.28 Mark 0070 and 0100 series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and prevent a short circuit of a fire extinguisher electrical system due to a lack of shrink sleeves or grommets, and consequent disabling of the affected fire extinguisher system, accomplish the following:

Inspection and Modification, If Necessary

(a) Within 12 months after the effective date of this AD, perform a measurement of the resistance of the electrical lines on the auxiliary power unit (APU) and engine fire extinguisher bottles to detect a short circuit, in accordance with Part A of the Accomplishment Instructions of Fokker Service Bulletin SBF100-26-015, dated August 15, 1999.

(1) If no short circuit is detected, at the next scheduled weight check of the fire extinguishing bottle, or within 2 years after the inspection required by paragraph (a) of this AD, whichever occurs first, perform a general visual inspection to determine if the grommets or shrink sleeves are present and installed properly. If any grommet or shrink sleeve is missing or not installed properly, prior to further flight, perform the modification of the connectors, in accordance with Part B of the Accomplishment Instructions of the service bulletin.

(2) If any short circuit is detected, prior to further flight, perform a general visual inspection to determine if the grommets or shrink sleeves are present and installed properly. If any grommet or shrink sleeve is missing or not installed properly, prior to further flight, perform the modification of the connectors, in accordance with Part B of the Accomplishment Instructions of the service bulletin.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with of Fokker Service Bulletin SBF100-26-015, dated August 15, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Fokker Services B.V., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in Dutch airworthiness directive 1999-110, dated August 31, 1999.

(e) This amendment becomes effective on March 30, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 15, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

ISRAEL AIRCRAFT INDUSTRIES, LTD
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-04-05 ISRAEL AIRCRAFT INDUSTRIES, LTD.: Amendment 39-11587. Docket 99-NM-256-AD.

Applicability: Model Astra SPX series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent cracks in the lower scissors fitting and fitting attachment bolts of the horizontal stabilizer, which could result in possible in-flight loss of the horizontal stabilizer and consequent reduced controllability of the airplane, accomplish the following:

Inspections and Corrective Actions

(a) Within 30 flight hours after the effective date of this AD, perform a detailed visual inspection of the bolt holes in the lower scissors fitting of the horizontal stabilizer to measure the countersink angle, in accordance with Astra Alert Service Bulletin 1125-55A-192, Revision 1, dated June 1, 1999.

(1) If the measured angle of countersink is within the limits specified in the alert service bulletin, no further action is required by this AD.

(2) If the measured countersink angle is outside the limits specified in the alert service bulletin, prior to further flight, perform a detailed visual inspection of the fitting attachment bolts in the lower scissors fitting of the horizontal stabilizer to detect concave bolt heads, in accordance with the alert service bulletin.

(i) If no bolt head is found to be concave, repeat the inspection required by paragraph (a)(2) of this AD thereafter at intervals not to exceed 50 flight hours; and, within 250 flight hours after the initial inspection required by paragraph (a) of this AD, rework all bolt holes and replace the existing bolts with new bolts in accordance with the Accomplishment Instructions of the alert service bulletin. Such rework constitutes terminating action for the repetitive inspections required by this paragraph.

(ii) If any bolt head is found to be concave, prior to further flight, rework all bolt holes and replace the existing bolts with new bolts, in accordance with the Accomplishment Instructions of the alert service bulletin.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with Astra Alert Service Bulletin 1125-55A-192, Revision 1, dated June 1, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Galaxy Aerospace Corporation, One Galaxy Way, Fort Worth Alliance Airport, Fort Worth, Texas 76177. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in Israeli airworthiness directive 55-99-04-02R2, dated August 4, 1999.

(e) This amendment becomes effective on March 29, 2000.

FOR FURTHER INFORMATION CONTACT:
Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 14, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-04-06 AIRBUS INDUSTRIE: Amendment 39-11588. Docket 99-NM-339-AD.

Applicability: Model A319, A320, and A321 series airplanes; certificated in any category; equipped with any emergency evacuation slide having a part number (P/N) listed as:

D31516-103	D31517-103
D31516-105	D31517-105
D31516-107	D31517-107
D31516-109	D31517-109

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent the ingestion of sill support-log material into the aspirator of the escape slide which could result in failure of the escape slide to inflate, accomplish the following:

Modification

(a) Within three years after the effective date of this AD, modify the forward and aft emergency evacuation slides by replacing the Velcro restraints for the support logs with frangible link restraints, in accordance with Airbus Service Bulletin A320-25-1215, dated April 29, 1999.

NOTE 2: Airbus Service Bulletin A320-25-1215 refers to Air Cruisers Service Bulletin S.B. 004-25-51, dated February 26, 1999, as an additional source of service information for accomplishment of the modification.

(b) As of the effective date of this AD, no person shall install on any airplane an emergency evacuation slide, P/N D31516-103, D31516-105, D31516-107, D31516-109, D31517-103, D31517-105, D31517-107, or D31517-109.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The modification shall be done in accordance with Airbus Service Bulletin A320-25-1215, dated April 29, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in French airworthiness directive 1999-356-136(B), dated September 8, 1999.

(f) This amendment becomes effective on March 30, 2000.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 15, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BRITISH AEROSPACE REGIONAL AIRCRAFT
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-04-07 BRITISH AEROSPACE REGIONAL AIRCRAFT [Formerly Jetstream Aircraft Limited; British Aerospace (Commercial Aircraft) Limited]: Amendment 39-11589. Docket 99-NM-344-AD.

Applicability: All Model ATP airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the engine intake de-icing system, which could result in loss of engine intake de-icing capability, accretion of ice in the intake duct, ice ingestion, and consequent engine flameout, accomplish the following:

One-Time Inspection

(a) Within 3 months after the effective date of this AD: Perform a one-time detailed visual inspection to detect incorrect installation or discrepancies (damage, bending, overheating, discoloration) of the circuit breaker and the cable terminations of the circuit breaker of the engine de-ice panel, in accordance with Part 5 of the Accomplishment Instructions of British Aerospace Service Bulletin ATP-30-52, Revision 1, dated June 12, 1998. If any incorrect installation or discrepancy is detected, prior to further flight, repair it in accordance with the service bulletin.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Manager, International Branch, ANM-116.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The inspection and repair shall be done in accordance with British Aerospace Service Bulletin ATP-30-52, Revision 1, dated June 12, 1998. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in British airworthiness directive 007-01-98.

(e) This amendment becomes effective on March 30, 2000.

FOR FURTHER INFORMATION CONTACT:
Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 15. 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service

THE BOEING COMPANY
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-04-08 BOEING: Amendment 39-11590. Docket 99-NM-352-AD.

Applicability: Model 737-200C series airplanes having line numbers 292 and subsequent, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracking in certain fuselage frames, which, in conjunction with multiple site cracking in the lower skin of the lap joint, could result in failure of certain lap joints, and consequent rapid decompression of the airplane fuselage, accomplish the following:

Repetitive Inspections

(a) Prior to the accumulation of 50,000 total flight cycles, or within 600 flight cycles after the effective date of this AD, whichever occurs later: Perform a low frequency eddy current (sliding probe) inspection to detect cracking in accordance with Part 3.A. of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1220, dated October 4, 1999. Repeat the inspections at intervals not to exceed 600 flight cycles until accomplishment of the requirements of paragraph (b) of this AD.

(b) Within 2,500 flight cycles following accomplishment of the initial inspection required by paragraph (a) of this AD: Perform an internal detailed visual inspection to detect cracking in accordance with the Part 3.B. of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1220, dated October 4, 1999. Repeat the inspection thereafter at intervals not to exceed 2,500 flight cycles until the modification required by paragraph (d) of this AD is accomplished.

Detailed Visual Inspection

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Corrective Actions

(c) Prior to further flight, repair any cracking detected by any inspection required by paragraph (a) or (b) of this AD in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

Optional Terminating Action

(d) Installation of the preventative modification of the BS 480 frame in accordance with Part 3.C. of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1220, dated October 4, 1999, constitutes terminating action for the requirements of this AD.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(g) Except as provided by paragraph (c) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 737-53A1220, dated October 4, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on March 10, 2000.

FOR FURTHER INFORMATION CONTACT:
James G. Rehrl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2783; fax (425) 227-1181.

Issued in Renton, Washington, on February 15, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

EMBRAER
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-04-09 EMPRESA BRASILEIRA DE AERONAUTICA S.A. (EMBRAER): Amendment 39-11591. Docket 99-NM-370-AD.

Applicability: Model EMB-135 and EMB-145 series airplanes, as listed in Embraer Alert Service Bulletin S.B. 145-55-A022, Change 02, dated October 8, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent the linkage of the elevator servo tab or spring tab hinge fittings from separating from the horizontal stabilizer, which could result in loss of control of the airplane, accomplish the following:

Detailed Visual Inspection

(a) Within 10 flight hours after the effective date of this AD, perform a detailed visual inspection to verify proper attachment, as specified in the alert service bulletin, of the left- and right-hand elevator servo tab and spring tab hinge fittings of the horizontal stabilizer, in accordance with Part I of the Accomplishment Instructions of Embraer Alert Service Bulletin S.B. 145-55-A022, Change 02, dated October 8, 1999.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirrors, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) If all elevator servo tab and spring tab hinge fittings are properly attached, as specified in the alert service bulletin, repeat the detailed visual inspection thereafter at intervals not to exceed 100 flight hours until the requirements of paragraph (b) of this AD are accomplished.

(2) If any elevator servo tab or spring tab hinge fitting is improperly attached, as specified in the alert service bulletin, prior to further flight, accomplish the requirements of either paragraph (a)(2)(i) or (a)(2)(ii) of this AD.

(i) Replace the affected tab with a new or serviceable tab in accordance with Part I of the Accomplishment Instruction of the alert service bulletin. Thereafter, repeat the detailed visual inspection required by paragraph (a) of this AD at intervals not to exceed 100 flight hours until the requirements of paragraph (b) of this AD are accomplished. Following replacement of all tabs, repeat the inspection required by paragraph (a) of this AD at intervals not to exceed 400 flight cycles; or

(ii) Accomplish the requirements of paragraphs (b) of this AD.

(b) For airplanes that have not replaced all elevator servo tabs and spring tabs: Within 400 flight hours after the effective date of this AD, perform a one-time detailed visual inspection to detect relative movement between the servo tab center hinge fitting and the tab lower skin and tab spar, and between the elevator spring tab inboard hinge fitting and the tab upper skin and tab spar, in accordance with Part II of the Accomplishment Instructions of Embraer Alert Service Bulletin S.B. 145-55-A022, Change 02, dated October 8, 1999.

(1) If no relative movement is detected, prior to further flight, rework the elevator servo tabs and spring tabs and perform a boroscopic inspection to verify correct installation, as specified in the alert service bulletin, of the fasteners attaching the elevator servo tab and spring tab hinge fittings to the elevator servo tab and spring tab, in accordance with Part II of the Accomplishment Instruction of the alert service bulletin.

(i) If all fasteners attaching the elevator servo tab and spring tab hinge fittings are installed correctly, repeat the inspection required by paragraph (a) of this AD at intervals not to exceed 400 flight cycles.

(ii) If any fastener attaching the elevator servo tab or spring tab hinge fittings is incorrectly installed, as specified in the alert service bulletin, prior to further flight, replace, one at a time, each affected fastener with a new fastener and washer, and prior to further flight, repeat the boroscopic inspection required by paragraph (b)(1) of this AD. When correct fastener installation is verified, repeat the inspection required by paragraph (a) of this AD at intervals not to exceed 400 flight cycles.

NOTE 3: Replacement of the attaching fasteners one at a time will avoid the loss of the servo tab or spring tab hinge fittings position.

(2) If any relative movement is detected, prior to further flight, replace the affected tab with a new or serviceable tab, in accordance with Part II of the Accomplishment Instructions of the alert service bulletin. Following replacement of all tabs, repeat the inspection required by paragraph (a) of this AD at intervals not to exceed 400 flight cycles.

NOTE 4: Accomplishment of the actions required by this AD prior to the effective date of this AD, in accordance with Embraer Alert Service Bulletin S.B. 145-55-A022, dated September 24, 1999, or Revision 01, dated October 7, 1999, is considered acceptable for the compliance with the applicable actions specified by this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with Embraer Alert Service Bulletin S.B. 145-55-A022, Change 02, dated October 8, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343 - CEP 12.225, Sao Jose dos Campos - SP, Brazil. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 6: The subject of this AD is addressed in Brazilian airworthiness directive 1999-09-01R1, dated October 25, 1999.

(f) This amendment becomes effective on March 10, 2000.

FOR FURTHER INFORMATION CONTACT:

Satish Lall, Aerospace Engineer, Airframe and Propulsion Branch, ACE-117A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30337-2748; telephone (770) 703-6082; fax (770) 703-6097.

Issued in Renton, Washington, on February 15, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT

2000-04-11 AIRBUS INDUSTRIE: Amendment 39-11593. Docket 2000-NM-51-AD.

Applicability: Model A319, A320, and A321 series airplanes; certificated in any category; equipped with Rockwell Collins radio altimeter LRA 700 having part number (P/N) 622-4542-020; excluding those on which Airbus Modification 26017 (Airbus Service Bulletin A320-31-1106) has been installed.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent erroneous display of decision height information to the flight crew during final approach, which could result in an increased risk of collision with the terrain, accomplish the following:

Airplane Flight Manual (AFM) Revision

(a) Within 10 days after the effective date of this AD, revise the Limitations and Normal Procedures Sections of the FAA-approved AFM by inserting a copy of Airbus Temporary Revision (TR) 2.05.00/43, dated September 16, 1999, into the AFM.

NOTE 2: When the Temporary Revision required by paragraph (a) of this AD has been incorporated into the general revisions of the AFM, the general revisions may be inserted into the AFM, provided that the information contained in the general revisions is identical to that specified in the Temporary Revision.

Optional Terminating Modification

(b) In lieu of accomplishing the requirements of paragraph (a) of this AD, modify the flight warning computers, in accordance with Airbus Service Bulletin A320-31-1106, Revision 04, dated December 21, 1999. After accomplishment of the modification, the AFM temporary revision required by paragraph (a) of this AD may be removed from the AFM.

NOTE 3: Accomplishment of the modification specified by paragraph (b) of the AD, prior to the effective date of this AD, in accordance with Airbus Service Bulletin A320-31-1106, Revision 01, dated April 16, 1997; Revision 02, dated January 20, 1998; or Revision 03, dated July 9, 1999; is considered acceptable for compliance with the applicable actions specified in paragraph (b) of this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The revision to the Airplane Flight Manual shall be done in accordance with Airbus Temporary Revision 2.05.00/43, dated September 16, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 5: The subject of this AD is addressed in French airworthiness directive 2000-004-142(B), dated January 12, 2000.

(f) This amendment becomes effective on March 10, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 15, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.